

## **Abstract**

### **Aim and objectives:**

The present study is aimed at evaluating the expression of beta-catenin in well differentiated and poorly /undifferentiated thyroid tumors. Also to identify tumors which may not have favourable outcome.

### **Methods :**

In this study , paraffin blocks from 30 thyroidectomy specimens are stained with monoclonal antibodies reactive with beta-catenin. These includes 22 cases of papillary carcinoma of thyroid ( 16 cases of conventional PTC, 3 cases of FVPC, 2 cases of cribriform morular variant , 1 case of hobnail variant),4 cases of FC, 3 cases of MC and 1 case of PDC.

### **Results :**

Papillary carcinoma conventional type, other variants of PTC and FC expressed residual membranous positivity and diffuse cytoplasmic positivity with occasional nuclear positivity. PTC,FVPC and hobnail variant shows few nuclear inclusion positivity. PDC shows diffuse cytoplasmic positivity with severe loss of membrane positivity .

### **Conclusion:**

In this study, from the data and observations it lead to the conclusion that loss of membrane positivity of beta catenin with cytoplasmic and nuclear expression correlate well with aggressive behaviour i.e increased invasiveness and metastasis.

**Key words :** PTC- Papillary carcinoma of thyroid, FVTC- Follicular variant of papillary carcinoma of thyroid, FC- follicular carcinoma, MC-medullary carcinoma, PDC- Poorly differentiated carcinoma.